Patent Application of
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for

PIECE OF FURNITURE

The invention relates to a piece of furniture on which a person may sit or recline in various positions.

Various reclining chairs and arm chairs are known from the prior art that offer support for the legs and provide the opportunity to vary the position of the body.

Some of these known chairs, for example the type known as the "Stress-less" chair, are suited for support of the body in both a sitting and reclining position. These chairs resemble foremost arm chairs and it is necessary to adjust either the chairs' back support members or seating members, or both, in order to adjust the chairs from the one position to the other. The design of these chairs rarely gives the user the immediate feeling that the chair offers a flexible means of use. In contrast, the chair according to the present invention communicates to the user at first glance that it is a piece of furniture with a plurality of means of use. Because the construction of the chair communicates its function so clearly, the user will quickly ascertain that this piece of furniture can be used in various sitting and reclining positions.

Reclining chairs of the type "LeCorbusier" are also known from the prior art. This type of recliner does not, however, offer the opportunity for an independent sitting position providing back support. While the user can adjust the recliner between different reclining positions, it is not possible to bring the recliner in a position where the user can sit with support for his or her back and with his or her feet placed on the floor.

Unites States patent 4,941,709 discloses an examination chair having a rotating seat member and means for adjusting the chair from a sitting position to a reclining position. This examination chair is based in part on the same principles as the chairs described above, in that the chair must be manipulated in order to change between the sitting position and the reclining position. The examination chair is thus substantially different than the piece of furniture according to the present invention, and furthermore does not provide support for varied body positions other than standard sitting and reclining positions. In addition, the rotating seat member from US 4,941,709 has a different function than the rotating seat member of the present invention. The seat member of the present invention is supplied with an independent back support member, and provides an independent sitting function with back support that is separate from the chair's reclining function. It should therefore be apparent that there are significant differences between the examination chair and the

chair of the present invention in regards to both their areas of use and their physical features.

It is the object of the invention to provide a piece of furniture that meets the body's needs for movement and variation between different sitting positions. It is a further object of the invention that the chair's construction encourages the user to vary between different body-positions, due to the fact that the chair's design makes it simple and natural to alter one's sitting style.

These objects are achieved by the piece of furniture according to the independent claims and further by the features of the piece of furniture as claimed in the dependent claims. The physical form of the piece of furniture is flexible and versatile and makes it simple to vary the position of the body between positions, in that the user can either lay or sit on the piece of furniture. The piece of furniture will often be appreciated as multi-functional piece of furniture.

The piece of furniture according to the invention comprises a support member that has an elongated, bench-like form. The support member can have flat or curved surfaces, thus providing surfaces that can in alternate modes offer support for the user's various body parts. The invention further comprises at least one seat member with back support, whereby the seat member is attached to the support member such that the seat member can rotate. In one embodiment, the back support member is capable of being regulated or removed. The back support may possibly be moved from the seat member to the support member.

Under normal use, the user will, for example, sit in a normal seated position in the seat member of the chair, with his or her feet resting on the floor and with support in the back from the back support member. In this position, the user can rest his or her arms against a section of the support member's surface that preferably projects out from under the seat member.

In addition, the support member can also be utilized as an ordinary reclining surface where the user's derriere typically will rest on the seat member while the remainder of the user's torso and legs are supported by the support member.

In a preferred embodiment, the support member is formed with a recessed section where the seat member is attached.

In another preferred embodiment, two or more sections of the support member are arranged at an angle sloping down towards the recessed section. Said sloping arrangement of the support member gives the user the opportunity to lie in a partially prone reclining position, as well as allowing the support member to

function as a support for other parts of the body when the user is in a seated position on the seat member.

In one embodiment, the length of at least one of the sections of the support member can be adjusted, such that section of the support member that projects out from the seat member can be adjusted. The adjustment of the length of the support member can be achieved by, for example, mounting the sections of the support member on a slide-able track arrangement that can be moved in and out in relation to the seat member. A person skilled in the art will appreciate that the length adjustment is used when the support member comprises angled sections. In an alternative embodiment, only one of the sections of the support member is capable of adjustment to its length. With such an embodiment, the user will be able to adjust the section's length in relation to his or her height or dependent upon the intended manner of use.

In the embodiment that comprises a support member having angled sections, the angle between at least one of said sections and the seating member may be adjusted. According to this embodiment, the user may adjust one or both of the angled sections such that one of such sections can be placed in desired positions ranging from substantially horizontal, through intermediate positions and to positions of various angles.

In an alternate embodiment, the support member has a form whereby both sections of the support member are substantially in the horizontal plane and cannot be adjusted, or in the alternative, one of said sections may be adjusted to various angles while the other section remains horizontally plane.

The recessed section of the support member, where the seat member preferably is placed, will preferably be arranged substantially at the midpoint of the support member. Further in accordance with one embodiment of the invention, the lower surface of the seat member facing the recessed section of the support member will have a form that is compatible with the recessed section. The seat member can take various forms, so long as the form provides the ability for the seat member to rotate in relation to the support member. It is to be understood that it is not required that the seat member be mounted in a recessed section, however such an arrangement is preferred.

Because the seat member can rotate in relation to the support member, the user can easily vary his or her position by, for example, rotating the seat member such that the user can switch from a seated position to one where the user rests his or her legs on the support member. The rotating seat member on the support member also

allows the chair to be used from both sides. When the chair is placed in the middle of a room it thus provides a flexible means of use.

In an alternative embodiment, a plurality of seat members can be arranged on the support member, and the chair according to the invention can thus be used by several persons simultaneously. Alternatively, it is also possible to provide a plurality of support members side-by-side, or one after the other, in order to provide a piece of furniture that may be used by several persons. One or more seat members in this embodiment can be arranged on each support member.

The support member, when viewed from above, will preferably have a shape that tapers in towards the recessed section, and with the recessed section being placed at the midpoint this shape will be symmetrical. The tapered shape provides a comfortable sitting position for the user when seated on the seat member using the back support member, with his or her feet on the floor. The shape of the support member with broader sections against the short side's edge area gives good support for the various parts of the body in the various positions. The support member can however have different shapes when viewed from above; the shape can be asymmetric, curved, rectangular etc. It is left to the preferences of one skilled in the art to select the shape that is most advantageous in any given circumstance.

The support member will preferably be supplied with an undercarriage that ensures that the parts of the chair, such as for instance the seat member, have an appropriate height above the floor. In other embodiments, the piece of furniture according to the invention can be arranged such that the seat member is positioned at the same level as the floor, possibly such that the support member forms an extra seating surface.

In one embodiment, the support member's undercarriage is formed as four legs that may be angled or vertically attached to the support member. The number and attachment areas can vary depending upon the additional functions of the piece of furniture. Alternatively, the undercarriage may be a crossed-foot arrangement. In other embodiments, the undercarriage can be, for example, a foundation having a cradle-like form. The piece of furniture can also be supplied with runners that may or may not be removable. The piece of furniture can have other types of undercarriage than those named here. One skilled in the art will appreciate that the undercarriage can be varied within the scope of the invention as claimed in the independent claim, considering that the invention's function and aesthetic form can be a determining factor in the choice of undercarriage. For example, the choice of slim, metal legs will provide a piece of furniture that is both aesthetically pleasing and easy to move.

The piece of furniture can be supplied with at least one accessory member that preferably is attached to the support member's long or short side. The accessory member(s) can function as a leg support, head/neck rest, arm rest, table surface, extra seating surface, etc. The specific accessory member can be removable and can also be adjustably attached to the support member, where, for example, it would desirable to adjust the accessory member such as in the case of a neck rest.

In a preferred embodiment of the piece of furniture, the support member is supplied with two accessory members attached to each of the short sides of the support member, preferably such that each accessory member projects out from the support member. In a further preferred embodiment, one of the accessory members is a plate and the other is a pillow. The plate can be attached to the support member in such a manner that the plate can be rotated in over the support member. The plate and the pillow can be attached to the support member by tubular elements, but other attachment means are possible. The pillow will preferably be raised in relation to the support member and can be cylindrical in shape.

In one embodiment the seat member, the back support member and the support member can be upholstered, however the piece of furniture can be made of alternate materials such as wood where the support member is constructed from a curved wooden plate.

A preferred embodiment of the piece of furniture will be described in detail with reference to the attached drawings, wherein:

Fig 1 is a perspective view of the piece of furniture

Fig 2 shows side and top elevational views of the piece of furniture

Fig 3 shows the piece of furniture as can be employed by a user for different sitting and reclining positions

The figures show the piece of furniture 1 comprising a support member 2 having an elongated, bench-like shape. In the embodiment shown in the figures, support member 2 forms two slanted sections 3 and 4, and a recessed section 5. A seat member 6 is rotatably mounted to support member 2 in recessed section 5. Seat member 6 as shown in the figures is supplied with a back support member 7 that may be adjustable. Piece of furniture 1 is further supplied with a plate 9 that is attached to support member 2 along its short edge by tubular elements 9'. Along the opposite short edge of support member 2 is attached a pillow 10 by tubular elements 10'. As shown in the figures, pillow 10 is raised above support member 2

whereas plate 9 has a horizontal position at the short edge of support member 2. Piece of furniture 1 is further equipped with four slender legs 11.

Fig 2 shows piece of furniture 1 with seat member 6 rotated in various positions. As seen, the lower surface of seat member 6 has a shape that corresponds to the shape of recessed section 5. It can be further seen from the illustrations of Fig 2, which shows support member 2 in top elevational view, that support member 2 is symmetrically tapered toward recessed section 5.

Fig 3 shows examples of various sitting and reclining positions made possible by the invention. Seat member 6 is rotated between different positions and plate 9 is used in the different positions as support for the arm, a leg rest and as a table. It can be further seen in fig 3 that pillow 10 can be used both as support for the neck and legs. Support member 2 is used to support the body in various reclining positions, as support for the arms or as a rest for the torso. It should be pointed out that these uses of the piece of furniture as shown by the user in fig 3 should not be taken as limiting the scope of the invention, in that the illustrations are merely examples of the possible uses a user may enjoy.

The remaining embodiments of the invention as provided in the claims are not illustrated in the figures and reference is therefore made to the specification for a more detailed description of these embodiments.